underlie, though to a lesser extent, the recently concluded negotiations for a U.S.-Canada free-trade area. But, as recent writings of Representative Jack Kemp and Senator Phil Gramm only underline, part of the motivation here is certainly the desire to deflect protectionist pressures by pedaling rapidly on any pro-trade bicycle, by chalking up trade-expanding victories that take the political momentum away from the protectionists, and by harnessing directly the export interests of those who would find preferentially protected markets in the countries that would join free-trade areas.[20] The regrettable surrender of the United States on this important front must be ascribed to a short-sighted application of the strategy of harnessing export interests.[21]

I shall turn later to an analysis of the need for improved institutions and for responses to protectionist pressures, and of the need to exploit the opportunity to strengthen the pro-trade forces that are being released by interdependence. Here it should suffice to stress that these new forces are indeed significant. They are also likely to strengthen over time with increased integration and interdependence in the world economy. They give us cause for joy if we are for trade, and for sorrow if we are not.

20. As the U.S. Trade Representative, Ambassador William Brock was reportedly exploring free-trade-area arrangements with any politically agreeable country that might come on board. Such arrangements were allegedly offered to Egypt as well as Israel and discussed with members of the Association of South East Asian Nations.

21. The standard defense of such preferential treatments as the U.S.-Israel and U.S.-Canada free-trade areas—that they leave open the possibility that other nations will join in—does not give enough weight to the strength of trade lobbies, who would object to the entry of new members. The U.S. Congress has not seriously addressed this matter, nor has it systematically analyzed the related matter of the trade-diverting effects of these arrangements.

Ideology: Example and Ideas

5

I ended chapter 4 on an optimistic note, arguing that new pro-trade interests had been created by the increasing interdependence of the world economy and that they should endure and grow. But, as I demonstrated for the remarkable episode of postwar trade liberalization, interests do not work in isolation. I should like to argue now that ideology, in the sense of both example and ideas, also provides grounds for optimism on the part of those who favor freer trade. Once again, in the realms of both example and ideas, there are both pro-protection and pro-trade arguments. However, the pro-trade proponents seem to have the better of it. I will elaborate.

Example

Postwar Trade Liberalization

Whereas the post–World War II trade liberalization was driven by the pro-trade bias generated by the negative example of the Smoot-Hawley tariff, today's pro-trade bias can be traced to the positive example of the successful postwar liberalization. And the perception that postwar prosperity was fueled (if not led) by the freeing of trade has greatly

strengthened the pro-trade bias inherited from before the Second World War.

The Success of Trade-Liberalizing Developing Countries

The postwar experience has also served to dispel the anti-trade bias that once afflicted policymakers in the developing countries and led to the unusually high reliance on protection that I sketched above. The example that produced this shift in attitudes was the superlative economic performance of those countries (in particular, the Four Tigers[1] of East Asia) that unilaterally liberalized their trade regimes during the 1950s.

This phenomenon is of extraordinary significance. Not only did it demonstrate to developing countries that trade liberalization pays handsome dividends even to a country that, because of its underdevelopment, is presumably somehow beyond the reach of the pro-trade doctrine; in addition, it inevitably generated revisionist reactions addressed to the question whether protection rather than freer trade had been the key to these countries' success.

Let us take a closer look at these issues in the context of the trade policies of the developing countries. We shall then turn to the broader questions they raise—questions that touch directly on the new intellectual developments in the theory of commercial policy.

The Protectionist Tradition

The intellectual traditions that legitimated the protectionist policies of the developing countries define the pro-protectionist elements that the successful trade liberalization of the Four Tigers helped to contain.

The inward-looking protectionist strategy of policy-induced import substitution had four distinct elements, which occurred in various combinations in different developing countries in the 1950s:

- The dominant element was clearly the widespread pessimism concerning the export prospects of the developing countries. Ragnar Nurkse (1959) articulated this pessimism splendidly. The fear was that the growth of the developing countries would require export levels that could not be absorbed by the outside world or by other developing countries. An investment policy of "balanced growth," whereby a country would increasingly have to produce what it wished to consume, would then be dictated by this scenario. Import substitution, assisted by the government, would be both necessary and efficient.[2] This argument does not actually justify blanket protection, but that is essentially what it led to in practice. Because economists are susceptible to the herd instinct, it is not surprising that the writings of many influential development economists of the 1940s and the 1950s reflect pessimism about exports. For instance, Paul Rosenstein-Rodan (1943) argued that investment would not be undertaken by one investor unless it was undertaken simultaneously by others, and that planned coordination of investment, assuring each investor of a market, was therefore necessary. This difficulty, however, would not necessarily arise if there were international markets capable of absorbing

1. Taiwan, South Korea, Hong Kong, and Singapore.

2. In economic jargon: If export pessimism of Nurkse's variety is justified, then the developing countries have monopoly power in trade, and an optimal tariff to exploit it is justified (subject to the qualifications concerning retaliation that I noted in chapter 2). Therefore, a protectionist import-substitution strategy, suitably calibrated, would make sense. Nurkse, having written perceptively about the interwar experience with competitive tariff-making and quantitative restrictions on imports, was not enthusiastic about tariffs; however, his "balanced growth" prescription requires protection as the optimal governmental intervention.

what an investor produced and sold.[3] Raul Prebisch (1952) produced the celebrated and captivating thesis that the primary-product exports of the developing countries faced a long-run decline, and that these countries would therefore have to protect their way into producing manufactures.[4]

• Although export pessimism generated an inward-looking ethos for trade policy, the *coup de grace* to freer trade was delivered, in many cases, from an altogether different direction. Contrary to the expectations of the architects of the International Monetary Fund, who had the interwar experience of knee-jerk competitive devaluations in mind when they stipulated restrictions on exchange-rate changes, the postwar exchange-rate regime turned out to be one of reluctant adjustments. Particularly in much of Latin America, exchange rates were sluggishly adjusted to high inflation rates, causing substantial currency overvaluation with supporting exchange and trade controls. As we now fully appreciate, such overvaluation is tantamount to protection.[5] It also led to blanket, made-to-order "automatic" protection in some developing countries. For instance, in Brazil the "Law of Similars" and in India the principle of "indigenous availability" were utilized to exclude imports, regardless of cost, if domestic substitutes (however unsuitable or uneconomical) were available; the rationale was that this would "save foreign exchange."[6]

• However, we should not forget that infant-industry protection had a perfectly legitimate role, even within the classical theory of gains from specialization and trade. Yet infant industries do not justify blanket protectionism; besides, promotion (i.e., support through domestic subvention that does not discriminate against foreign trade) rather than protection (which does discriminate against foreign trade) is what is called for. Nonetheless, both the infant-industry argument and the balance-of-payments foreign-exchange-scarcity argument outlined above were accepted indiscriminately, and in GATT Article XVIII(B) they were given international approval.

• Further reinforcement for the idea of broadly protecting infant industries came from the notion that specialization in primary production was politically unacceptable for a modern state. A destiny of "hewers of wood and drawers of water," no matter how advantageous economically, would be at the expense of political status in the international community of nations. (As Oscar Wilde said of the prime example of prosperity through primary production, "There is this world and the next, and then there is New Zealand.") This political preference for industrialization often coexisted with a conviction that manufacturing had considerable externalities—such as creation of a scientific mentality conducive to innovation and technical change—that were not fully reflected in market prices.[7] Whatever the precise mix of the

3. Rosenstein-Rodan also used the term "balanced growth," but his argument was altogether different from Nurkse's. Albert Hirschman's (1958) recommendation to induce investment by cutting off imports also fits the pessimism scenario, since the need to cultivate the domestic market arises only if the international markets are not fully and freely accessible (unless an extreme risk aversion to foreign markets is assumed).

4. Strictly speaking, if markets are working well, the mere fact of a long-run decline in the terms of trade would itself move resources into manufactures; no governmental protection to do so would be necessary. Thus, Prebisch's thesis—because its export pessimism was differently premised—had different trade-policy implications than Nurkse's. Nonetheless, it was used to justify import substitution in Latin America, and the attendant protection, in much the same way.

5. See Bhagwati 1986c, appendix.

6. See Bhagwati 1978 and Krueger 1978.

7. Similar convictions underlie, one way or another, the prescriptions of the British "deindustrialization" school (see Kaldor 1966) and the American "manufacturing matters" school (see Cohen and Zysman 1987).

"political status" and "economic externalities" motivations in any specific context, there is little doubt that the developing countries were particularly susceptible to this line of argumentation in the 1950s, when they were both newly independent and heavily specialized in primary production and exports. The historian Edward Carr, writing in 1951, put the argument eloquently:

What Asia and Africa are fundamentally in revolt against—whatever forms, political or economic, the revolt may take in day-to-day actions—is the nineteenth-century division of the world between advanced and backward peoples and the basis of that division in the intensive industrialization of certain areas of the world to the exclusion of others. Political independence and political equality are no longer enough. These achievements, which seemed all-important so long as they were out of reach, are now seen to be hollow and unreal unless they are backed up by the reality of economic independence and economic equality. . . . The lesson has been thoroughly learned and digested that large-scale modern machine industry confers a high material standard of living and a widely diffused education and culture, as well as political and military power and prestige. *Backward nations have been transformed into advanced nations through the process of industrialization—and in no other way. . . . Industry is the symbol of progress. Imitation is the last and sincerest form of tribute paid by the colonial East to the industrial West. (p. 94; emphasis added)*

These notions reinforced the other economic arguments that prompted the pursuit of protectionist, import-substitution strategies.

The Weakened Case for Protectionism

As the postwar period unfolded, the above arguments weakened. The mere fact of industrialization in many developing countries over two decades meant that, at the margin, the pro-industrialization arguments for protection would be less

compelling. But far more effective was the demonstration by the trade-liberalizing countries that their superior export performance had led to more successful and substantial industrialization than what the more protectionist nations had managed. By making external markets at least as attractive as home markets, and even by creating a certain pro-export bias by policy design, these countries made their new industries register rapid growth by breaking out of the confines of the smaller domestic markets.

Take the compelling contrast between South Korea and India—prime examples of trade-liberalizing and protectionist regimes. South Korea's manufactured exports, negligible in 1962, amounted by 1980 to nearly four times those of India. South Korea's manufacturing sector was less than 25 percent as large as India's in 1970 (measured in terms of value added); by 1981 it was already up to 60 percent. The contrasts in success with *industrialization*—not just economic growth in general—have been so enormous between the trade-liberalizing and the protectionist countries that the old-fashioned view that protection favors manufacturing in developing countries has lost its appeal.[8]

The main changes, however, were in the demise of the pattern of reluctant exchange-rate adjustment, so that currency overvaluation became a far less serious source of protection. As was demonstrated well (though by no means exclusively) by the Four Tigers, the removal of such anti-export policies and the establishment of a pro-export bias could improve export performance so dramatically that the protection-legitimating export pessimism of Nurkse et al. turned out to have been unwarranted. Indeed, the improve-

8. The older view was based on a static conception according to which primary products were imported and manufactures were exported. However, as industrialization proceeds, protectionist policies confine the new industries to domestic manufactures by creating an anti-export bias.

ment in export performance mapped rather well onto better economic performance—a relationship that was especially striking in the case of the Four Tigers but was also corroborated by finer empirical studies of those countries and by time-series analyses of other countries as they moved toward greater trade liberalization through the 1960s and the early 1970s.[9]

The intellectual orthodoxy therefore shifted rather sharply away from the early emphasis on the virtues of protectionism and the attendant import-substitution strategy and toward the merits of trade liberalization and the outward-looking strategy of export promotion.

The Role of Government

Most of the developing countries that made sustained transitions to more liberal trading regimes do not have *laissez faire* governments. Nor (except for Hong Kong and, perhaps, Singapore) are these free-trade economies that have abandoned protection altogether. For those who seek in the experiences of these economies an endorsement of free trade in the context of a passive government, these facts present obvious difficulties. A careful interpretation of the policy mix in these countries is called for.

In South Korea and Taiwan, neither of which is (like Hong Kong or Singapore) a "city-state" with a natural outward orientation, the shift to the export-promoting strategy took place essentially through a substantial reduction of overvaluation, with a consequent reduction in the degree of protection so afforded, and through the adoption of export incentives that offset and indeed outweighed the residual bias against exports by making the average incentive for exports (i.e., what economists call the *effective exchange rate on exports,*

9. I have in mind principally the OECD, NBER, World Bank, and Kiel Institute projects that I cited in chapter 1.

abbreviated EERx) greater than the average incentive to import (i.e., the *effective exchange rate on imports,* abbreviated EERm). Within this regime, which eliminated the anti-trade bias of the earlier regime (much as an alternative shift to free trade would have done), selectivity of incentives continued to be provided to specific industries. Fully free trade would not have permitted such continued selectivity, nor would it allow the net export incentive (EERx > EERm) of these regimes. Moreover, these policy departures from fully free trade reflected a symbiotic relationship between an active government and the private sector.

Let me offer some stylized explanations of why this combination of policies was productive, considering in turn the net pro-trade bias and the role of government.

The empirical studies of these successful regimes show that they typically involved an explicit endorsement of export promotion by the governments, with subsidies and credit mechanisms geared to that end. Quantification of the subventions shows, however, that they did not result in a substantial excess of incentives to export rather than to sell at home.[10] Now, the theoretical arguments for net export subsidization are well known. For example, for developing countries in particular, there may be externalities to a firm in export markets that are not matched by similar externalities in the domestic market, as when the export markets require investment to promote a product to foreign buyers who are unacquainted with a country's capacity to export this type of good and the returns to this investment then accrue equally to other free-riding potential exporters from that country.[11]

10. In formal terms, the computed excess of EERx over EERm was positive but not large. Indeed, it was substantially less than the reverse excess for the regimes that employed the import-substitution strategy.

11. See Bhagwati 1968 and Mayer 1984. There are also other theoretical arguments for export subsidies; e.g., the optimal tariff structure, as is evi-

But a case for net export subsidization may also be made on the ground that it lends credibility to the government's commitment to the maintenance of a policy framework that protects the export-promotion strategy from random or systematic inroads in the foreseeable future, thus facilitating the investment of resources and entrepreneurial energies in the exploitation of foreign markets. This may well be an important, distinguishing rationale for net export subsidies by developing countries. The role of the government is almost always more manifest there than in developed countries, so that the assurance that a strategy will be protected from disruption by other policy pressures and goals is correspondingly more important.

Perhaps the most compelling case for a framework of export incentives may lie in the beneficial effect that this may exert through the learning by doing and the dynamic economies of scale that are often alleged to characterize protected infant industries. Conventional analyses (e.g. Arrow 1962, Bardhan 1970, Kemp 1966, and Krugman 1984) simply assume that learning accrues from doing, and that markets will not capture fully the benefits of this learning process for firms in protected or promoted infant industries.[12]

dent from Graaff 1949–50 and Feenstra 1986, can include some subsidies, and the Kemp (1966)–Jones (1967) analysis of the optimal mix of capital-flow and trade taxes and subsidies can generate export subsidies in models with international capital mobility. Also, there are arguments for using import tariffs and export subsidies to simulate devaluations and for the use of export subsidies to offset the anti-trade bias in overvalued-exchange-rate regimes (Bhagwati 1968). Hence, it is surprising that economists who have recently been using oligopoly models to produce rationales for export subsidies have asserted that the conventional theory of international trade does not support export subsidization. (See, for instance, the extraordinary statements to that effect by several of the contributors to Krugman 1986.)

12. Krugman (1984) concentrates, rather, on how such protection, with scale economies, can lead to the firm's eventually exporting. Basevi (1970) and Pomfret (1975) did similarly. I have shown (Bhagwati 1986d) that such

On the other hand, the developing countries are witness to countless cases of firms and industries that did not grow out of protection-fed infancy. The problem lies in the foolish assumption that learning *automatically* follows from doing. As anyone who has taught should know, students can repeat courses and get nowhere. The Soviets have produced countless Ladas which you and I can happily do without. Rather, learning is a function of doing *within an appropriate environment*. The contrast between the sheltered-home-market environment created by protectionism and the internationalized environment imposed by a pro-trade bias is the real key to differential outcomes of the learning process.

The learning-by-doing school of protectionism comes up with the wrong prescription because its key assumption rests on an erroneous premise. The assumption that a firm inevitably learns by doing, no matter what, must be firmly rejected. In urging this, I am reminded of Thomas Balogh's advice to me on how to debate Milton Friedman: "As soon as Friedman says, 'let us assume this,' stop him and say: 'no, I do *not* assume that.' For, if you let him assume what he wants, you will be landed with consequences you do not like." In this instance, the consequences are not necessarily disagreeable, but they almost certainly will encourage folly and cause harm.

This brings us to the more general question of the role of government in the successful Far Eastern countries. These countries—including Japan—have highly energetic and involved governments, as has long been known to students of

a paradoxical phenomenon can exist *without invoking scale economies*, building exclusively on the fact that protection permits price discrimination by the protected domestic monopolist and leads to exports whereas free trade would have destroyed the monopoly and led to imports. My case, which is welfare-worsening for sure, is far more prevalent in many developing countries, and possibly elsewhere too, than the more sanguine possibility reflecting scale economies that Krugman has noted.

trade and of payment regimes.[13] This is not to deny that some have believed otherwise. For example, in one segment of "Free to Choose," Milton Friedman characterized Japan as an example of the superiority of the market over government. As a member of the panel on the program, I remarked that the visible hand in Japan might be invisible to him but was certainly not so to the Japanese. But Friedman can be forgiven for self-indulgence toward his economic beliefs; we are all prey to that in varying degrees. After all, how could an economic miracle have occurred if the policymakers had not followed our preferred policies? Recalling that public goods have the property that I can enjoy them without depriving you of your pleasure, I have formulated the following law: Economic miracles are a public good; each economist sees in them a vindication of his pet theories.

The key question is not whether there is governmental action in the Far Eastern economies, but rather how these successful economies have managed their intervention and their strategic decisionmaking better than the unsuccessful economies. This is a complex question, but some stylized answers can nonetheless be attempted.

An important aspect of the difference in behavior of governments toward the private sector seems to be that the Far Eastern governments, by and large, issue *prescriptions* rather than *proscriptions* (Bhagwati 1978, chapter 8), whereas countries such as India do the opposite. The governments of "dos" generally produce economic performance superior to that produced by governments of "don'ts." There are two reasons why this might be so.

First, although a prescriptive government may prescribe as badly as a proscriptive government proscribes, a proscriptive government will tend to stifle initiative, whereas a prescriptive government will tend to leave open areas (outside of the prescriptions) where initiative can be exercised. Thus, even though each government might distort allocation of existing resources equally, the proscriptive government will tend to stifle technical change and entrepreneurial activity and hence hurt growth. This is illustrated by figure 10, where *OAB* is the set of production possibilities. (Imagine that only pewter and pottery can be made from given resources and technology.) P^* is the optimal outcome. If government activity distorts the economy away from P^*, the proscriptive government distorts it to p_{pros} whereas the prescriptive government distorts it to p_{pres}. However, the latter permits rapid expansion of the production-possibility set. Productive forces grow faster, owing to less stifling of initiatives, and this allows people to do things other than the prescribed ones. As the arrows show, there is a greater *stifling effect* under the proscriptive regime.

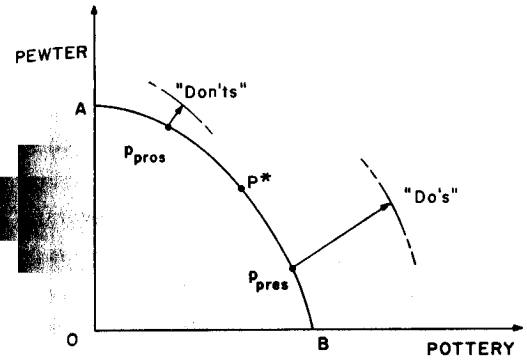

Figure 10 The stifling effect. Proscriptive governments stifle initiative more than prescriptive ones, causing production possibilities to expand less rapidly.

Second, under proscriptive governments, entrepreneurs

13. See, e.g., chapter 8 of Bhagwati 1978.

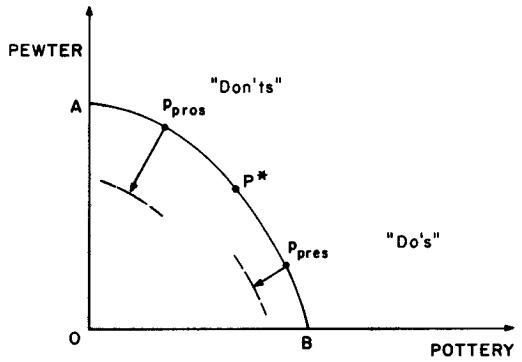

Figure 11 The DUP effect. Proscriptive governments induce more DUP activities than prescriptive ones, causing production possibilities to shrink more from wasteful use of resources.

tend to evade the proscriptions by diverting resources into unproductive ways of making income.[14] In contrast, prescriptive governments provide fewer inducements for such unproductive activities, because the prescriptions leave large areas open for initiatives. Note that in figure 11 the p_{pros} distortion leads to a greater shift *inside* the current production-possibility set. The *DUP effect* hurts the proscriptive government disproportionately.

Proscriptive governments are more likely to be adversarial to private entrepreneurship; the bureaucrats and the politicians are in the driver's seat. Prescriptive governments, in contrast, appear to work in a symbiotic relationship with private entrepreneurs. Japan and India provide two well-known illustrations of this contrast. The relationship between MITI and the Japanese firms is intimate, whereas that in India between the planners and the private entrepreneurs is not. Symbiosis between a government and private entrepreneurs can have two favorable effects. First, when engaging in planning for a particular industry, the government can make use of the entrepreneurs' familiarity with the industry—know-how that cannot otherwise be obtained by bureaucrats. Second, the symbiosis can reinforce the credibility of the government's commitment to an economic strategy such as outward orientation. With MITI agreeing to a projected or planned economic scenario, the government can be expected to adhere to a supportive policy mode rather than a disruptive one.

14. These are known as *directly unproductive profit-seeking* (DUP) activities. (See note 18 below.)

First versus Second Pessimism

There can be no question about the role played by the success of the Far Eastern economies in converting intellectual opinion in the developing countries to an appreciation of the benefits of outward orientation—and hence predisposing them toward unilateral initiatives to liberalize their highly protective external trade-and-payment regimes. These success stories demonstrated the fallacy of the "first pessimism" of the 1950s, which reflected the view that markets could not be found for increasing exports because of natural external constraints. But now, in the 1980s, there is evidence of a new pessimism.

The "second pessimism" is based not on the view that markets do not exist, but rather on the gloomy assessment that protectionism will close markets once one has entered them.[15] This view, unless one takes the extreme position so that *any* expansion of exports will lead to restrictive trade constraints and hence justify a comprehensive shift to what Nurkse called "balanced growth," requires a calibrated response. The implied lack of markets abroad in sectors where such protectionism is likely to materialize will suggest protectionist prudence by the exporter in these sectors alone,

15. The contrast between these two pessimisms is defined and analyzed in Bhagwati 1986c. See also Bhagwati, Krueger, and Snape 1987.

exactly as in John Stuart Mill's argument for a monopoly-power-in-trade tariff.

If, however, my assessment in chapter 4 is correct, there is reason for hope that the second pessimism will be invalidated, as the first pessimism was. And whereas the first pessimism reflected a gloomy assessment of *market forces,* so that the only option was to adjust to it through balanced growth, the second pessimism is *man-made.* It can therefore be remedied by human action. The governments of the trading countries can act to contain protectionism and maintain a freer trading system.

Ideas

As it happened, analyses of trade policies of the developing countries and of their differential performance (and other empirical observations) gave the recent developments in the theory of commercial policy their impetus. Economics at its best responds to empirical reality and puzzles, and here it did just that.

Interestingly, however, these developments have gone in two different directions, one enriching the anti-protectionist presumptions and the other enlarging the scope of beneficial trade intervention. The former theoretical breakthrough concerns the growing analysis of unproductive activities and their integration into the theoretical framework of political economy; the latter relates to the growth of imperfectly competitive (in particular, small-group oligopoly) models. The former primarily suggests that the conventional analyses of the cost of protection have ignored the associated costs of the unproductive activities to which protection gives rise. The latter, by introducing imperfections in the market, suggests that the possibilities of welfare-improving trade intervention

highlighted in conventional competitive analyses are also understated.

DUP Activities

The possibilities of widespread growth of resource-using unproductive activities, such as tariff evasion and lobbying for the procurement of lucrative import and investment licenses, were evident and important in many of the developing countries that were examined during the late 1960s. This led to the development of new theoretical analyses of these phenomena, to Krueger's (1974) development of the concept of *rent-seeking* to characterize lobbying for the premia (rents, in economic jargon) that quotas create and fetch, and to my development of the broader concept of *directly unproductive profit-seeking (DUP) activities* (Bhagwati 1982b).[16]

Thus, to the conventional "deadweight" loss, which protection causes by distorting production and consumption decisions, international economists now typically add an estimate of the lobbying costs that are likely to attend on seeking or securing import licenses and the like. However, the early presumptions of DUP theorists that these added costs would be extremely large have now given way to more modest expectations. There are at least two reasons for this. First, the earliest estimates—particularly those of Krueger (1974)—were based on the assumption that rent-seeking would lead to market-value losses as large as the rents being sought: a dollar lost for a dollar chased. This presupposes open competition among risk-neutral lobbyists. But in reality the "brother-in-

16. See the extensive review and synthesis of this literature in Bhagwati 1982b. The relationship between rent-seeking and DUP activities is explained in Bhagwati 1982b and in Bhagwati 1983. Tullock 1967 is a landmark in DUP theory; see also Colander 1984.

law theorem" often applies: Favored lobbyists usually have a better chance than the others of getting the license and the rent it fetches, and this deters others from expending as many resources on rent-seeking as perfect competition would imply.[17] Second, as T. N. Srinivasan and I have emphasized, market losses are not necessarily social losses. If import quotas have strongly distorted domestic allocation of resources to begin with, the market price of a dollar's worth of resources diverted to rent-seeking aimed at the import quotas is not its true social cost at all. In fact, in "highly distorted" economies such resource diversion, while directly unproductive, may paradoxically improve welfare (see, in particular, Bhagwati and Srinivasan 1980). In jargon, the shadow or social cost of productive factors withdrawn from productive use into DUP activities could be negative.[18] Although there are countless such observations of "value subtraction" in productive activities, when social costs and values rather than market prices are used to make estimates, this is undoubtedly an extreme phenomenon. Suffice it to say that the social cost of rent-seeking is likely, in distorted economies, to be below its nominal, market cost. But, with both these caveats duly noted, this literature does strengthen the anti-protectionist hand.

17. In turn, this presumption must be qualified somewhat: Becoming a favored lobbyist may require the expenditure of resources.

18. Theoretically, this observation is of profound importance, for it means that—contrary to the practice of James Buchanan (1980) and many others of the public-choice school—it is not meaningful to define unproductive activities as necessarily welfare-worsening. This is why the adjective *directly* is used to qualify those unproductive profit-seeking activities, since (indirectly or ultimately) they may improve welfare. Hence, I use the term *DUP activities* to describe the generic set of activities that use resources and produce income but zero output. On these questions—which affect critically the untenable equation of direct and ultimate waste in both the works of the public-choice school and the long-standing discussions (since Adam Smith and Karl Marx) of the concept of unproductive labor and activities—see Bhagwati 1980, 1982b, 1983.

On the other hand, the development of the theory of international trade in the direction of models with imperfect competition (resulting from increasing returns to scale of production) has pushed the scientific frontier in the opposite direction.

At first blush this is paradoxical, since the primary way in which analysts of developing countries' trade policies have considered increasing returns to scale has been by arguing that protectionist policies, by stimulating production for the small domestic market, would impose large losses owing to the small scale of production. Further, by making domestic monopoly possible—whereas free trade would have destroyed this monopoly—protection would lead to conventional efficiency losses, and possibly to X-efficiency (i.e., "goofing-off") losses too. In this frame of thinking, the economies of scale are large in the context of the domestic market but are not large relative to the world market; they matter only (and then adversely) when protection makes them pertinent; under free trade they are of no consequence. I have little doubt that this is a reasonable approximation to the reality of many developing countries and many industries in all countries. It only underlines the case for free trade.

However, in the recent theoretical work of economists studying small-group market structure and its impact on commercial policy, it is assumed that economies of scale are large relative to world markets, and that they result in an oligopolistic market structure.[19] High-technology, knowl-

19. I have in mind here many authors, including James Brander, Barbara Spencer, Gene Grossman, Jonathan Eaton, James Markusen, Antony Venables, Paul Krugman, and Avinash Dixit. See the survey by Dixit (1983) and the synthesis by Eaton and Grossman (1986).

edge-intensive industries are generally presumed by these theorists to conform to this structure. In these cases, evidently, prices do not generally reflect social costs, either at home or in foreign trade. But although free trade under these circumstances is not (generally speaking) optimal, the problem is that the precise nature of the intervention to be used depends critically on the nature of the strategic interaction between the oligopolistic firms. Consider the highly simplified model (due originally to Brander and Spencer [1981]) in which one domestic firm and one foreign firm produce a homogeneous product only for a third country, where they compete. Here, an export subsidy is socially optimal if the firms follow the Cournot-Nash strategy, by which each firm selects its optimal level of output taking the output of the rival as given. But if in the very same model we assume that, rather than choosing output levels and letting prices adjust correspondingly, the firms engage in the Bertrand strategy of setting prices and letting outputs adjust to the demands at those prices, then the prescription for intervention is not an export subsidy but an export tax (see Eaton and Grossman 1986). In each case the intervention shifts the above-normal profits to the domestic firm and hence increases the national welfare.[20]

This sensitivity (or lack of robustness) of policy interventions to assumptions about the nature of oligopolistic strategic interaction creates information requirements for

20. An analogy with the monopoly-power-in-trade argument is apt. In that argument, monopoly power is not perceived by the firm that acts competitively, and the government intervenes with an optimal tariff that exploits this unperceived and neglected monopoly power. In the present instance, the firm cannot credibly move away from its reaction curve toward the maximal-profit, optimal-welfare output or price decision, and the government must intervene to shift the firm's reaction curve so that this maximal-profit output or price gets onto it.

policy intervention that appear to many of the architects of this theoretical innovation to be sufficiently intimidating to suggest that policymakers had better leave it alone.[21] This viewpoint is reinforced for them by doubts as to whether there are indeed (excess) profits to be shifted through such intervention. Grossman (1986, p. 57) has put it cogently:

Often what appears to be an especially high rate of profit is just a return to some earlier, risky investment. Research and development expenses, for example, can be quite large, and many ventures end in failure. Firms will only undertake these large investments if they can reap the benefits in those instances where they succeed. Once the market is in operation, we will of course only observe those companies that have succeeded. We may then be tempted to conclude that profit rates are unusually high. But industry profits should be measured inclusive of the losses of those who never make it to the marketing stage.

The practical application of the new and theoretically valid increasing-returns-based argument for policy intervention to shift profits toward oneself in oligopolistic industries is, therefore, beset with difficulties. These are further compounded, as was the classical theoretical prescription for an optimal tariff, by the fact that the new case for export subsidization or import tariffs[22] is based on considerations of *national*

21. There are informational requirements, to be sure, when conventional interventions for market failure are recommended. In this instance, however, we need information on behavioral assumptions, which seem harder to track down. Attempts by Spencer (1986), Rodrik (1987), and others to provide guidelines or rules of thumb for meaningful inferences of this kind are interesting but not persuasive.

22. Import tariffs can also shift profits, while gaining for the protected industry economies of scale that give it a competitive advantage over the foreign firms that are then denied access to this segment of the world market. See Krugman 1984.

advantage and presupposes that foreign governments do not retaliate.[23]

As with the unilateral exercise of an optimal tariff to exploit monopoly power in trade, the asymmetric, unilateral use by a government of export subsidies or import tariffs in oligopolistic industries to gain a competitive edge and possibly shift profits to the country's advantage is, however, likely to invite retaliation from aggrieved trading partners.

Such retaliation is likely in precisely the knowledge-intensive high-technology industries, in which economies of scale relative to world markets are presumed to be significant. These industries are widely regarded as important in themselves. Locating them behind one's own borders is often seen as a matter of securing broader political and economic benefits, just as manufacturing was so regarded by developing countries during the postwar years. Intervention by foreign governments, regardless of whether profit-shifting-related advantages exist or not, is generally seen, therefore, as an attempt to get a larger share of this important pie than is warranted by legitimate market forces. This is surely a major reason behind the sensitivity in the United States on this question, which leads to allegations of asymmetrical, predatory governmental interventions in such industries by Japan and to demands for retaliation.

If retaliation occurs, then it is not beyond the ingenuity of economists to construct cases in which it would still leave the country that had initiated the profit-shifting game better off. But, as with the earlier retaliation analysis of the optimal tariff for exploiting monopoly power, the competitive, retaliatory policies provoked by attempts at profit-shifting are likely to leave each country worse off, especially if such actions spill over into other areas of trade policy or drag other players into the game simply because of the multilateral aspects of international trade.

23. Strategic interaction is entirely confined to governments in conventional analysis, because firms are competitive. It is at both the firm level and the government level when firms are oligopolistic.

To shift the perspective: Should such retaliation be encouraged, or even embodied in national trade-policy rules? This is recommended by some (e.g. Krasner and Goldstein [1984]) who build on Axelrod's (1981) celebrated advocacy of a "tit for tat" strategy for inducing nonpredatory, cooperative behavior (after repeated games) by recalcitrant game players. Under this strategy, the United States would play fair on the first move and would then retaliate if Japan were to follow with a predatory move; subsequently, the United States would match Japan's moves. The problems with applying such strategies to trade policy are legion, and they show the irrelevance of the Axelrod prescription. In particular, bilateral determination of the other player's fairness may be confidently expected to lean toward being self-serving—what is tit and what is tat becomes problematic and contentious. A tat, unfairly alleged and retaliated against with a tit, will invite resentment and will probably generate trade skirmishes rather than lead down the benign cooperative route that Axelrod conjures up. Indeed, in a protectionist climate such as today's, tats are likely to be found readily and charged against successful rivals, and the Axelrod strategy is likely to be captured by those who seek export protectionism through voluntary import expansions.[24]

For these reasons, I am strongly opposed to strategic trade-policy-making, whether the intention is to shift profits

24. For a useful analysis of other limitations of the Axelrod strategy, see Brander 1985. I should emphasize that the Axelrod strategy, as originally analyzed, works with two players who are as long-lived as the repeated games they play, whereas trade typically involves more than two players and, in democracies in particular, the players change with changes in governments and in bureaucracies.

to oneself or to retaliate against rivals who are allegedly doing so. However, the problems and pressures raised by such fears and allegations require that the institutions governing trade policy be supplemented by procedures aimed at ensuring a *broad* balance of advantages from artificial subventions in a *limited* number of high-technology industries where significant scale economies relative to world markets can be plausibly established as important. I shall return to this question later, emphasizing that these procedures should be multilateral.

The "Manufacturing Matters" Muddle

At this point it is necessary to address and dismiss those who have recently advocated trade-policy interventions on the ground that "manufacturing matters." A number of different fallacies underlie the pro-manufacturing arguments that have surfaced and have fed protectionism.

• The most influential argument, which long predates the recent U.S. concerns about deindustrialization, came from Nicholas Kaldor (1966) and his colleagues at the Cambridge Department of Applied Economics.[25] The core of Kaldor's argument was that the progressive British shift out of manufactures into services was economically harmful because services were technically stagnant whereas manufactures were characterized by substantial technical change, and that this required state intervention to protect manufactures. Kaldor even managed even to get the Chancellor of the Exchequer, James Callaghan, to enact the (now repealed) Selective Employment Tax, which taxed employment in the service industries with a view to shifting labor into the manufacturing industries.

25. Adjustment pressures on British industry predated those on American industries, producing this differential timing of their deindustrialization schools. Another contrast is that the British school was led by distinguished economists such as Kaldor, whereas the American school has been made up of political scientists, sociologists, and economic journalists.

The problem with Kaldor's argument was the notion that services were technically stagnant. His view was undoubtedly formed by the empirical reality of the traditional British service sector, exemplified by the post office and the mom-and-pop retail stores outside Oxbridge Colleges. This has no counterpart in today's service sector, where technical progress is rapid and more striking than in many manufactures.

• There is also the related and frequently held presumption that manufactures generate beneficial externalities which other sectors do not. This goes back to earlier controversies over the merits of industrialization, such as the arguments that attended the early American debate on manufactures. Consider, for example, the following (quoted in Folsom and Lubar 1980 on the pages cited):

The introduction of manufactures would extend knowledge of all kinds, particularly scientifical. The elements of natural philosophy and of chemistry, now form an indispensable branch of education among the manufacturers of England. They cannot get on without it. They cannot understand or keep pace with the daily improvements of manufacture without scientific knowledge. (page 190)

There is another point of importance, in reference to manufactures, which ought not to be omitted in this connection, and it is this—that in addition to what may be called their direct operation and influence, manufactures are a great school for all the practical arts. As they are aided themselves, in the progress of inventive sagacity, by hints and materials from every art and every science, and every kingdom of nature, so, in their turn, they create the skill and furnish the instruments for carrying on almost all the other pursuits. Whatever pertains to machinery, in all the great branches of industry, will probably be found to have its origin, directly or indirectly, in that

skill which can be acquired only in connection with manufactures. (pages 289–290)

Whatever merit this line of argument may have had when manufactures were being compared with agriculture, it has surely no validity when manufactures are compared with modern services.

• Manufactures have even been considered character-forming, as in the following lines of nineteenth-century American verse:

From industry the sinews strength acquire,
The limbs expand, the bosom feels new fire.
Unwearied industry pervades the whole,
Nor lends more force to body than to soul.

Hence character is form'd, and hence proceeds
Th' enlivening heat that fires to daring deeds:
Then animation bids the spirit warm,
Soar in the whirlwind and enjoy the storm.
(quoted: Folsom and Lubar 1980, p. 138)

But such sentiments have been expressed in defense of every sector for which protection has been sought. (Agriculture in developed countries and services in developing countries have been the principal beneficiaries of such special pleas.)

• The proponents of manufactures have even suggested that pride and honor require a country to manufacture what it uses and consumes. Matching the occasional exhortation that a self-respecting country must grow its own food, the advocates of manufactures have often been animated by sentiments such as the following, expressed in 1808:

Is it not a reflection that even the flag of our country, *is made of Foreign manufacture, and our legislators and patriots, while delivering the most dignified and national sentiments, are clothed in the produce of a foreign land? It is—We shall ever bear a secondary grade, in the rank of nations, if we are not independent of all. We shall ever feel our insignificance, if we are dependent on others for what we most want, and what we can best supply. (quoted: Folsom and Lubar 1980, p. 154)*

Nothing bothers the proponents of pride in national production of manufactures so much as their fellow nationals who break ranks and buy foreign goods. The "Buy American" slogans of today are simply a latter-day manifestation of the spirit embodied in the following lines of early American verse:

Shall we, of gewgaws gleaning half the globe,
Disgrace our country with a foreign robe?
Forbid it int'rest, independence, shame,
And blush that kindles bright at honour's flame!

Should peace, like sorcery, with her spells controul
Our innate springs and energies of soul;
To you, Columbian dames! my accents call,
Oh, save your country from the threaten'd fall!
Will ye, blest fair! adopt from every zone
Fantastic fashions, noxious in your own?
At wintry balls in gauzy garments drest,
Admit the dire destroyer in your breast?
(quoted: Folsom and Lubar 1980, p. 138)

• The modern American enthusiasts of manufactures have developed yet another innovative argument. According to Cohen and Zysman (1987, chapter 2), having manufactures is critical because a shift to modern services without local manufacturing is improbable and perhaps impossible. Economists, according to these gentlemen, are in error when they argue as if the decline of manufacturing and the rise of services can be contemplated; linkages between the two make

this a contradiction.[26] Let me quote them lest anyone think I am offering a straw man:

There are . . . other kinds of linkages in the economy, such as those which tie the crop duster to the cotton fields, the ketchup maker to the tomato patch, the wine press to the vineyards (to return to our focus on agriculture [as a parallel]). Here the linkages are tight and quite concrete . . . the linkage is a bind, not a junction or substitution point. Offshore the tomato farm and you close or offshore the ketchup plant. No two ways about it.

Now, as I read the profound assertion about the tomato farm and the ketchup plant, I was eating my favorite Crabtree & Evelyn vintage marmalade. It surely had not occurred to me that England grew its own oranges.

These fallacies have acquired greater appeal in recent years in the industrialized countries, for reasons that were explained in chapter 4. The awareness that similar fallacies have occurred in earlier periods, and that many of their premises have been flawed, should help to contain their pernicious influence. But this brings me to my final theme: How should our institutions be adapted, in light of the evolving trends in interests and ideas, so that the impact of the forces of protection is weakened and the new anti-protection forces are strengthened and given greater play?

26. Zysman and Cohen—who appear not to have been familiar with the older and more influential English school of deindustrialization worriers—assume complementarity between services and manufactures, whereas the English school assumes substitution between them. Starting from opposed premises, the two schools manage nonetheless to leave their adherents with identical fears.

Institutional Reform

6

The analysis of recent protectionism and the prognosis of future trends, as defined by both interests and ideology, suggest several institutional changes, small and large, that would aid the forces favoring freer trade and would inhibit, impede, and deflect the protagonists of protection. Let me first outline two broad areas of reform and then sketch certain "areas of understanding" where more enlightened comprehension and appreciation of trade-policy questions will be needed if vulnerability to protectionist pressures is to be avoided.

Institutional Change: Balancing Interests Better

The need for institutional changes that will give more play to the forces favoring freer trade and will permit the costs of protection to weigh more adequately in the deliberations than they now do is evident. The pro-protectionism bias of the current institutions needs to be corrected. Let me suggest some possibilities.

• To minimize the capture of the anti-dumping and countervailing-duty mechanisms by protectionists for the purposes of harassment and trade restriction, it would be useful to